



Specifications and References for the LEED Professional Accreditation Exam LEED for New Construction Track

The LEED for New Commercial Construction and Major Renovations v2.2 Rating System provides a set of performance standards for certifying the design and construction phases of commercial, institutional buildings, and high-rise residential buildings. The intent of LEED for New Construction is to assist in the creation of high performance, healthful, durable, affordable and environmentally sound commercial and institutional buildings.

The specific credits in the rating system provide guidance for the design and construction of buildings of all sizes in both private and public sectors. LEED for New Construction addresses both the design and construction activities of new commercial buildings as well as major renovations of existing buildings.

The LEED Professional Accreditation exam, LEED for New Construction track provides a standard for professionals participating in the design and construction of new commercial buildings. LEED Professional Accreditation provides verification of individual expertise in the principals of green design and construction practices and provides professionals a path to establish credibility in the marketplace. In addition, LEED Accredited Professionals help building owners to achieve performance goals and facilitate the LEED certification process. LEED Professional Accreditation establishes a critical link between LEED standards and professional practice.

References

The primary source for the development of the LEED for New Construction exam track is the LEED for New Construction v2.2 Rating System. This as well as other sources listed below are helpful in learning more about the LEED for New Construction certification process.

- LEED for New Construction Reference Guide, Version 2.2
- USGBC Web site at www.usgbc.org
 - LEED Certification Process
 - LEED Project Registration
 - LEED Submittal Templates
 - LEED Online

-

Test Specifications

The specifications for each section of the LEED Professional Accreditation exam are organized to include a statement of intent and a list of various content areas. This structure provides the volunteer Subject Matter Experts with a framework to guide the development of exam items to assess whether a candidate is capable of performing specific tasks and services. The following outline provides a general description of exam content areas.

1. Knowledge of LEED for New Construction Credit Intents and Requirements

- 1.1 Apply LEED for New Construction definitions consistently across all credits.
- 1.2 Establish level of knowledge of LEED for New Construction credit intents requirements, submittals, technologies, and strategies for site credit category.

- 1.3 Establish level of knowledge of LEED for New Construction credit intents requirements, submittals, technologies, and strategies for water credit category.
 - 1.4 Establish level of knowledge of LEED for New Construction credit intents requirements, submittals, technologies, and strategies for energy credit category.
 - 1.5 Establish level of knowledge of LEED for New Construction credit intents requirements, submittals, technologies, and strategies for materials credit category.
 - 1.6 Establish level of knowledge of LEED for New Construction credit intents requirements, submittals, technologies, and strategies for Indoor Environmental Quality (IEQ) credit category.
 - 1.7 Describe format and process for achieving innovation in upgrades, operations and maintenance credits.
2. Coordinate Project and Team
 - 2.1 Gather all project information and requirements to support the LEED for New Construction process.
 - 2.2 Manage coordination of multiple job functions to achieve LEED for New Construction certification
 - 2.3 Identify standards that support LEED for New Construction credits.
 - 2.4 Identify opportunities for integrated design and credit synergies to support LEED for New Construction certification. Explore systems integration opportunities
 - 2.5 Identify critical path elements and schedule to implement LEED process. Develop and implement green building strategies critical path
3. Implement LEED for New Construction Process
 - 3.1 Select appropriate LEED product for project scope
 - 3.2 Register project for LEED for New Construction certification on-line.
 - 3.3 Demonstrate knowledge of CIR process and resources.
 - 3.4 Manage LEED for New Construction documentation/certification process.
 - 3.5 Manage and complete letter templates.
 - 3.6 Draft and review innovation credits.
4. Verify, Participate In, and Perform Technical Analyses Required for LEED for New Construction Credits
 - 4.1 Verify compliance of technical work products created by other team members.
 - 4.2 Participate in and guide the development of technical analyses with design professionals.
 - 4.3 Perform technical analyses to verify compliance with LEED for New Construction requirements

LEED for New Construction v2.2 Sample Exam Questions

COPYRIGHT 2008 by Green Building Certification Institute

Note: These sample questions are intended to provide examples of the style and content of the LEED Professional Accreditation Exam developed and administered by the Green Building Certification Institute (GBCI). They are not actual test questions, nor do they attempt to address all of the content areas covered on the actual exam. Success on these questions is not indicative of success on the LEED Professional Accreditation examination.

Section One: Knowledge of LEED for New Construction Credit Intents and Requirements

1. Which two of the following are considered sources of potable water in LEED? (Choose two.)
 - A. irrigation wells
 - B. captured rain water
 - C. municipal water system
 - D. municipally supplied reclaimed waste water

2. A proposed 40,000 Sq. Ft. building with five equal floors is located within a university campus with no zoning requirements.

In order to achieve SS Credit 5.2, Site Development: Maximize Open Space the vegetated open space area adjacent to the building must be _____ Sq. Ft.

- A. 2,500
 - B. 5,000
 - C. 7,500
 - D. 8,000

3. Increasing outdoor air ventilation rates by at least 30% above the minimum rates required by ASHRAE Standard 62.1-2004 will _____.
 - A. improve thermal comfort
 - B. improve indoor air quality
 - C. assist with compliance with EA Prerequisite 2, Minimum Energy Performance
 - D. assist with compliance with EA Prerequisite 1, Fundamental Commissioning of the Building Energy Systems

Section Two: Coordinate Project and Team

1. A value engineering exercise has proposed that exterior horizontal louvers above south-facing windows will be deleted from the project. The change requires that various project team members review strategies and reconfirm calculations for several credits.

Which three credits would be affected by this decision? (Choose three.)

- A. EA Credit 6, Green Power
 - B. SS Credit 7.1, Heat Island Effect: Non-Roof

- C. EA Credit 1, Optimize Energy Performance
 - D. EQ Credit 1, Outdoor Air Delivery Monitoring
 - E. EQ Credit 8.1, Daylight and Views: Daylight 75% of Spaces
2. Which LEED-referenced standard includes a volatile organic compound (VOC) limit for waterproofing sealers?
- A. Green Seal Standard GS-11, Paints
 - B. Green Seal Standard GC-03, Anti-Corrosive Paints
 - C. Bay Area Air Quality Management District Regulation 8, Rule 51
 - D. South Coast Air Quality Management District Rule 1113, Architectural Coatings
3. Which strategy will contribute to earning points for both EA Credit 1, Optimize Energy Performance and EA Credit 2, On-Site Renewable Energy?
- A. utilize ground source heat pumps for heating and cooling
 - B. implement architectural passive solar and daylighting strategies
 - C. install active solar thermal energy systems that employ collection panels
 - D. purchase tradable renewable energy certificates

Section Three: Implement LEED for New Construction Process

1. A project involves the renovation of an existing commercial office building, which includes 4 of 10 stories and the core and shell. Project scope includes window replacement, HVAC equipment replacement, plumbing replacement and tenant fit-out of the owner occupied space.

Which rating system product(s) should be used for this project?

- A. LEED for New Construction
 - B. LEED for Existing Buildings and LEED for Commercial Interiors
 - C. LEED for Commercial Interiors and LEED for Core and Shell
 - D. LEED for Core and Shell and LEED for Existing Buildings
2. Which two are true statements about the LEED certification process? (Choose two.)
- A. No credits are awarded during a Design Phase Review.
 - B. Appeals may only be filed following a Construction Phase Review.

- C. LEED certification may be awarded following a Design Phase Review.
- D. Additional information must be submitted during the Construction Phase Review for any Design Phase attempted credits that have changed.

3. A LEED-registered project has a complex issue, which makes it so the project does not comply with every aspect of a particular credit's requirements as written. Furthermore, that credit's submittal template does not address the issue within its own format.

What should the responsible party do?

- A. contact USGBC review team directly to resolve the issue with appropriate documentation
- B. provide a separate narrative explaining the complex issue and how the credit intent is met
- C. complete the submittal template as though all aspects of the credit's requirements are met as written and submit for review
- D. use the alternative compliance path option on the LEED submittal template and provide a narrative demonstrating compliance

Section Four: Verify, Participate In, and Perform Technical Analyses Required for LEED for New Construction Credits

1. Which three should be included in the specifications to inform the contractors and subcontractors of the requirements for MR Credit 2, Construction Waste Management? (Choose three.)

- A. quantity of waste leaving site
- B. description of waste material
- C. approximate amount of recycled material
- D. requirement to identify haulers and recyclers
- E. description of the requirements for a site logistics plan

2. For a 200-occupant, all-residential condominium, the architect's plan indicates the use of bicycle racks that hold 10 bicycles inside the parking structure.

What must the architect do to comply with SS Credit 4.2, Alternative Transportation: Bicycle Storage & Changing Rooms?

- A. replace the bicycle racks with bicycle lockers
- B. increase the number of bicycle racks to hold 30 bicycles
- C. provide two shower/changing rooms in the parking structure, one for each gender

- D. confirm that the bicycle storage location is within 200 yards of the building entrance

3. A building is undergoing a major renovation and expansion. The addition is 1.5 times the square footage of the existing building.

To achieve MR Credit 1, Building Reuse, what existing surface area information must be available to document compliance with this credit? (Choose three.)

- A. window assemblies
- B. exterior skin and framing
- C. landscaped area to be retained
- D. structural floor and roof decking
- E. mechanical, electrical, and plumbing equipment

Answers: Section One (1 - AC, 2 - D, 3 - B), Section Two (1 - ACE, 2 - D, 3 - C), Section Three (1 - C, 2 - AD, 3 - D), Section Four (1- ABD, 2 - B, 3 - ABD)